

Published Monthly
June – September
Volume 5, Issue 3

Northwoods Journal

August 2007

Enjoying and Protecting Marinette County’s Outdoor Life

IN THIS ISSUE:

Destination: The Peshtigo River	1
Wisconsin’s Amphibians: <i>Frogs & Toads, Part One</i>	2
UW-Extension	3
Lake Monitoring Opportunities	4
Shoreline Restoration Brochure	4
Astronomy: Meteors & the Moon	4
Native Trees & Shrubs <i>The Sugar Maple</i>	5
Citizen Lake Monitoring Network	5
Great Lakes Coastal Wetlands	6
Where in Marinette County?	7
Harmony Arboretum Calendar	8
Area Events Calendar	8

Come visit us at the Marinette County Fair!



Visit the Education Tent at the Marinette County Fair August 23-26th at the Wausaukee Fairgrounds! The Education Tent is co-sponsored by the Marinette County UW-Extension, Land & Water Conservation, and the Parks Department and gives visitors the opportunity to learn about many different topics. You can get brochures, maps, and other information, and ask department staff any questions you may have.

The Education Tent is located directly across from the main Exhibit Building and Fair Office. Staff will be present in the tent from 9 a.m. to 9 p.m. Thursday, Friday, and Saturday, and until 5 p.m. on Sunday.

This year’s displays include nutrition, agricultural issues, parks, shoreland restoration, lakes, and other water resources. In addition, there are games and activities within the tent, with prizes for those who are able to make their way through our quiz board. If you have any questions about UW-Extension, Land & Water Conservation or the Parks Department, stop by the Education Tent, or contact UW-Extension at 715-732-7510; Land & Water Conservation at 715-732-7780; and Parks at 715-732-7530. We hope to see you at the fair!

Destination: Marinette County’s Peshtigo River

By Chuck Druckrey, Water Resource Specialist



As a destination, the Peshtigo River has something for everyone. If you prefer fishing, water skiing or just cruising on the pontoon boat, you can find what you need on the Peshtigo River. If human-powered boats are more your style, leave the motors behind and explore remote sections of the river for days. And for those of you who prefer going boatless, the Peshtigo has plenty of camping, swimming, waterfalls and wading. Overall, the Peshtigo River is one of the premier water resources in Marinette County.

When it enters Marinette County in the Town of Silver Cliff, the Peshtigo has already traveled more than 27 miles on its 94-mile journey from its source in the wetlands north of Crandon to the Bay. Between the County line and Caldron Falls Flowage, the river flows for 20 miles through some of the most spectacular scenery in Marinette County. Two County parks are located along this stretch of river: Goodman Park and McClintock Park. Goodman Park provides camping, a picnic area, and an arching wooden bridge that provides access to both shores and unique views of the river.



Four miles downstream, McClintock Park has its own rapids and another footbridge spanning the river. The campground here has been converted to allow ATV camping. Throughout this section you will find numerous rapids and falls that will thrill the whitewater boater.

Downstream from McClintock, the river is slightly more sedate for a couple miles before it enters the “Roaring Rapids” section. As the name implies, this stretch of the river is only for serious whitewater enthusiasts. The novice can experience the thrill of whitewater

boating with one of the many rafting outfitters that ply this premier whitewater river. For the angler, the upper portion of the river is accessible for most of its length and supports brown and rainbow trout. Most of the smaller tributaries to the Peshtigo are home to brook trout. Fishing access is good at the parks and at numerous sites along Parkway and Benson Lake Roads.



After Roaring Rapids, the river slows as it enters Caldron Falls Flowage. This 1,018-acre impoundment is a favorite of anglers and supports walleye, bass, and panfish. Caldron is also home to a sizeable population of musky. The shores of Caldron Falls, once owned by Wisconsin Public Service Corporation, are now part of the newly formed Peshtigo River State Forest. In coming years, the newly created Governor Thompson State Park will offer camping facilities.

Following closely below the Caldron Falls dam is the 1,497-acre High Falls Flowage. Like its upstream cousin, High Falls supports a healthy fishery with walleye, musky, northern pike and panfish. High Falls is also one of the most popular waters in the county for recreational boaters. Weekends often find the flowage buzzing with skiers and other pleasure boaters, but the numerous bays and shallow areas still provide refuge for the angler looking for a quiet place to fish. Twin Bridge Park is located on High Falls Flowage and offers camping, a swimming beach, and picnic area. The Peshtigo River State Forest provides numerous boat landings on Caldron and High Falls Flowages.

PESHTIGO RIVER continued on page 7

THE FROGS & TOADS OF MARINETTE COUNTY, PART ONE

By Greg "The Egg" Cleereman, County Conservationist

Photos courtesy of Stan Tekiela, from *Reptiles & Amphibians of Wisconsin Field Guide*

So far in this series, we have covered general amphibian anatomy/ecology and an introduction to the salamanders of Marinette County. This month we begin looking at our most obvious and recognizable amphibians - frogs and toads. One species of toad and nine frog species call Marinette County home. Due to the number of species and their very different life histories, the discussion will be broken into two parts. This month we will look at the Eastern American Toad, Green Frog, and Bullfrog. September's installment of the *Northwoods Journal* will look at our Treefrogs and remaining True Frog species.

Unlike salamanders, frogs are quite vocal, although only during the breeding season. Each spring, male frogs and toads move to aquatic breeding areas, usually temporary ponds. There they use species-specific calls to attract females and, in some cases, repel other males. The breeding period is based on water temperature. There are groups of frogs that breed beginning at roughly 50, 60, and 70 degrees Fahrenheit (respectively). For some frogs breeding is quite frenzied, with males grabbing anything that appears frog-like and trying to mate with it. *Amplexus* is the special breeding embrace used by frogs and toads in which the male grasps the female tightly behind the front legs with his front legs. In this position the male fertilizes the eggs as they are released. In several frog species, the females have a special "release" call that tells assaulting males to stop amplexus.

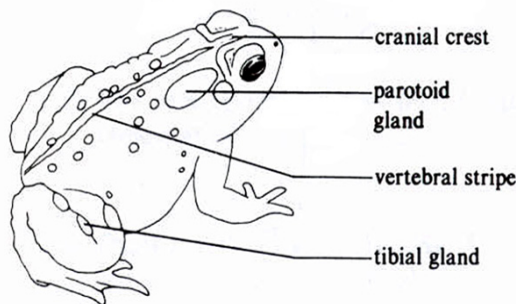
The Eastern American Toad may be the best known of our amphibians. It is stocky (2-4.4 inches), with "warty," mottled tan, brown or gray skin. Toads have the ability to lighten and darken their skin to match their surroundings and adults can tolerate a large variety of habitats, including suburban areas and backyards. Although seen much more often during daylight than frogs, toads are most active on moist or rainy nights. During the day, they dig themselves into



soft soil or leaf litter - in fact, many a gardener has been startled by soil seeming to move on its own, only to find that they have roused a sleeping toad from its bed. Most gardeners know to leave a sleeping toad lie because of the good work they for us, eating slugs and many insect pests and their larvae. Toads may gather under yard or streetlights to capture insects attracted there.

Like frogs, toads shoot out sticky tongues to ensnare prey and use their front legs to gather larger food into toothless mouths. Although it is a myth that toads cause warts, they do have chemical defenses against predators. Kidney-shaped parotoid glands are located on the skin behind the eyes. These glands secrete steroidal chemicals that affect heart function and blood pressure and can kill small mammals. Grabbing a toad can also result in a spray of urine. Cryptic coloration and burrowing also protect toads from predators. Toads may hunch forward and puff themselves up to seem larger. Despite these defenses, toads are prey to Common Garter and Eastern Hognose snakes, birds of prey and raccoons, all of which have learned to eat only from the toad's belly to avoid the poisonous glands.

American Toads generally breed in shallow temporary waters that have aquatic vegetation, but will use lakes if necessary. When evening temperatures warm up, male toads move toward breeding areas a few days before the females, and begin calling when water temperatures reach about 60° F. The toad's call is a long trill delivered at the water's edge. During this time



males grab any passing toad; however, once a receptive female is amplexed, they both move to another part of the pond to lay and fertilize the eggs. This journey is often perilous, as other males try to cut in. Females are sometimes drowned as competing males fight over breeding rights. During amplexus, the female lays 2,000 to 20,000 eggs in two strings. The male fertilizes eggs as they emerge and then are draped over vegetation. Hatching occurs in up to two weeks depending on water temperature. The black tadpoles form in easily seen schools and move together in the shallows. Tadpoles eat algae, plankton, soft vegetation and carrion during the 6 to 10 weeks it takes to form toadlets, and in turn they are eaten by fish and aquatic insects. Shortly after metamorphosis, thousands of tiny toads may be found near breeding areas, but few will live to reach sexual maturity in three years.

Bull and Green Frogs are members of a group known as the "true" frogs because they fit the more traditional idea of a frog in that they are variations of green, have moist smooth skin and a "croaking" call. They live very different lives from toads and are much more frequently heard rather than seen. These two frogs don't get far from the permanent lakes, sloughs, impoundments and wetlands in which they breed (an exception are newly emerged Green Frogs, which sometimes disperse into new territories). Adults and undeveloped

tadpoles of both species spend the winter buried in the mud and debris on the bottoms of permanent water bodies.

Bullfrogs are Wisconsin's largest species, measuring up to 8 inches. They may be green, olive or brown on the back with dark bands on the hind legs, and the belly is white or cream-colored. There is a ridge of skin beginning behind the eye and curving behind the tympanum (eardrum) to the shoulder. Hind feet are fully webbed except for the tip of the longest toe. You can tell male from female because the male's tympanum is larger than its eye and the throat is yellow. Tadpoles are green or brownish above with dark spots on the upper tail fin and have white or cream-colored bellies. The breeding call is a resonating "barroom." Bullfrogs are inactive until water temperatures reach 60° F, generally from October to May. Upon emerging adults eat predominantly aquatic and terrestrial invertebrates (like insects and crayfish) and almost anything else that will fit in their mouths, including fish, other amphibians, reptiles, young or small birds, and small mammals. They will stalk other frogs by zeroing in on their calls. Tadpoles eat algae, aquatic plants and decaying animal matter. Although predators, Bullfrogs are prey to fish, reptiles, birds, and mammals like raccoons and mink. When grabbed, Bullfrogs may emit a piercing scream that may scare a predator into letting go. When water temperatures reach 70° F, males begin to call for mates and defend a breeding territory up to 18 feet in diameter. The largest males get the best spots. Females choose mates based on the quality of territory as an egg laying site. Females may lay up to 20,000 eggs in a floating mass, which hatch in just a few days. They remain as tadpoles for up to three years and take an additional two to four years to reach sexual maturity.



Green Frogs (2.4- 4.2 inches) are smaller than Bullfrogs. They may be green or brown above with dark spots on the back and sides, and white below. A ridge of skin extends from the eye about two-thirds of the way down the back. Adult males, like toads, have a bright yellow throat and a tympanum that is much larger than its eye. Tadpoles are very similar to Bullfrog tadpoles, except that dark spots are present on both the upper and lower tail fin instead of just on the upper tail fin. In addition, tadpoles' bellies are more iridescent. The Green Frog's call is a "gung" or "clung", often described as sounding like the plucking of a banjo. Green Frogs are active somewhat earlier and later in the year (April to November)



than Bullfrogs. In ice-free waters they may be active all winter. They are ambush predators, waiting to pounce on insects and other invertebrates, other frogs, and small reptiles. Tadpoles eat mostly algae and decaying organic matter. Many predators feed on Green Frogs at their various life stages: turtles and leeches eat eggs; aquatic insects, fish, and birds eat tadpoles; and larger frogs, snakes, birds, and mammals eat the adults. To avoid predators, the Green Frog will leap into the water and dig into bottom mud and debris.

Breeding begins in late May when water temperatures reach about 70° F and continues during a breeding season that extends into August. Males call from territories that they defend from other males, and if intruding males ignore repeated calls, a wrestling match follows. Unlike males, the females only visit preferred breeding areas long enough to lay eggs. The female approaches and turns her back on the chosen male, who then initiates amplexus - up to 5,000 eggs are then laid in a thin mass that attaches to floating vegetation. Hatching occurs in less than a week, and tadpoles from early season hatching may metamorphose in the same year. Later hatchlings overwinter as tadpoles.

These frogs are important to the "up north" character of Marinette County lakes. Although still present in many water bodies, anecdotal evidence indicates that Bullfrogs are in decline. The Green Frog population is in better shape, but like Bullfrogs they are dependent on quality habitat and clean water. Green Frogs are also considered an indicator species whose presence, absence, or relative well-being in a given habitat is indicative of the health of that habitat. In simplest terms: what is good for Green Frogs is good for the lake. If you have few or no Green Frogs on your lake, there might be something going on that is unhealthy for the lake ecosystem as a whole. To learn more about these interesting creatures, read *Amphibians and Reptiles of the Great Lakes Region* by James H. Harding, or visit the Wisconsin DNR online at <http://dnr.wi.gov/org/land/er/herps>.



Meet Marinette County's University of Wisconsin - Extension (UWEX)

By Scott Reuss, UW-Extension Horticulture/Agriculture Agent

Marinette County University of Wisconsin - Extension (UWEX) exists to meet the information and education needs of Marinette County residents. Our mission is to disseminate and encourage the use of research-based information and leadership techniques to all Marinette County residents. However, our two slogans probably say more about us: "Today's information to solve tomorrow's problems" and "Sharing knowledge to improve your quality of life".



Meeting this open-ended mission means we must be open to change and have a broad base of backgrounds. The UW-Extension department is organized into five program teams, each having educators who plan and program according to various community

issues. To meet the changing needs of the county and its residents, each program area plans events and opportunities annually, but maintains flexibility to change plans to meet new needs or issues. The five program teams, their personnel, and a snapshot of the topics with which they work are as follows:

Community, Natural Resource, and Economic Development – Nancy Servais: Land Use, Natural Resource & Environmental Education, Economic Development, Tourism and Recreation Education, & Local Government Education.



Agriculture & Horticulture – Scott Reuss and Linda Warren: Forage and Grazing Management, Nutrient and Pest Management, Grain Crops Management, Master Gardener Training, Diversified Crop and Livestock Opportunities, & Garden/Turf/Landscape Plants.

Family Living - Nancy Crevier and Jennifer Madden: Community Partnerships, Parenting Education/ Child

Care Provider Training, Local Needs Assessments, Nutrition/Physical Activity, Food Preservation and Safety, Financial Management/Housing, Consumer Decision Making, & Family Caregiving.

Nutrition Education Program - Kay Rich, Shirley Kaufman, and Jennifer Madden: Foods, Nutrition and Money Management, Individual Counseling, Infant Feeding and Pre-School Nutrition, & "Learn While You Wait" Nutrition Presentations.

4-H & Youth Development - Wally Hitt and Nancy Servais: Community Service and Awareness, Youth Camping and Low Ropes Challenge Course, Prevention Education for Youth, Leadership Development and Teen Court, & "Hands-On" Educational Opportunities for Youth in the following areas: Animal sciences, speech, drama, music, food and nutrition, photography, horticulture, and cultural arts.



Our department is very diverse and works with many different topics over the course of the year, and we don't do it alone. There are three extremely important groups of volunteers that work with UWEX personnel to assist in meeting our program goals: the Marinette County Association for Home & Community Education (<http://www.wahceinc.org>); the Marinette County 4-H Association (<http://4h.uwex.edu/index.cfm>); and the Northern Lights Master Gardener Association (www.hort.wisc.edu/mastergardener/locals/Nolights/nolites.htm).

The members of these groups assist UWEX staff in many ways, including planning and delivering educational programs, assisting at events, and managing demonstration areas. We also collaborate with many other county/state agencies and groups such as the Land & Water Conservation Division. UWEX is collaboratively funded with a mix of federal, state, and county monies.

The effectiveness of our programming relies on being aware of the needs and issues of Marinette County and its residents. We invite all residents to share their opinions about these needs and issues by participating in our issues identification process that will occur in August and September. You will be able to visit our web page, contact us at the UWEX office, or visit us in the Education Tent at the Marinette County Fair on August 23-26th to give us your input. You will also be able to see examples of most of the program topics listed above at our displays in the Education Tent, so stop in and see us from 9 am to 9 pm all four days of the fair (see sidebar on page 1 for more county fair information).



To contact UWEX, please call our office in the county courthouse at 715-732-7510, or call our toll-free number at 1-877-884-4408. You can also visit our web page online at <http://www.uwex.edu/ces/cty/marinette> for information on all of our programs, upcoming events, links and other resources, and for staff e-mail addresses. (Photos clockwise from upper left: tree pruning demonstration; Harmony Arboretum Demonstration Gardens; 4-H Super Saturday crafts; Family Fun Day at Camp Bird in Crivitz).

Northwoods Journal

Volume 5, Issue 3

The *Northwoods Journal* focuses on various outdoor recreation opportunities and local environmental topics to inform readers about natural resource use, management, and recreation in Marinette County. Published in cooperation by the Marinette County Land & Water Conservation Division, Parks & Outdoor Recreation Department, and University of Wisconsin-Extension.

UW-Extension provides equal opportunities in employment and programming, including Title IX and ADA. To ensure equal access, please make requests for reasonable accommodations as soon as possible prior to the scheduled program. If you need this material in another format, please contact the UW-Extension office at 715-732-7510.

Please send comments to: Marinette County Land & Water Conservation
1926 Hall Ave, Marinette, WI 54143

Call (715) 732-7780 or email: awarren@marinettecounty.com

Visit the county website at <http://www.marinettecounty.com>



CALLING ALL VOLUNTEERS! LAKE MONITORING OPPORTUNITIES IN MARINETTE COUNTY

If you would like to learn more about your favorite lake, track long-term changes in water quality, or keep an eye on the biological community, there is a volunteer monitoring program for you. For each program the DNR, Marinette County Land & Water Conservation Division (LWCD), or UW-Extension Lakes Program will provide the necessary equipment and training to get you started (see also "Citizen Lake Monitoring Network" information on page 5).

WATER CLARITY MONITORING

Measuring water clarity with a *Secchi disk* is the most basic form of water quality monitoring. Volunteers measure water clarity by lowering an 8-inch diameter black and white disk into the water on a rope until it can no longer be seen, then this depth is recorded. Measurements are typically recorded on a monthly or even bi-monthly basis during the open water season. By doing something as simple as tracking a lake's water clarity you can detect changes in algae concentration and nutrient levels.

WATER CHEMISTRY MONITORING

After a year of tracking water clarity, some volunteers step up to water chemistry monitoring. In addition to the monthly Secchi disc readings, these volunteers collect water samples to be analyzed for phosphorus and chlorophyll content. With this information the trophic state (overall health) of your lake can be measured more reliably. Some chemistry monitors also take a dissolved oxygen and temperature profile of their lake. Openings for chemistry monitoring are limited and depend on the interest of the volunteers and the needs of the lake.

AQUATIC PLANT MONITORING

For those wanting a little more hands-on experience, the DNR can train you to collect, identify, and map aquatic plants. Regular monitoring of aquatic plants allows lake managers to track changes in aquatic plant growth and helps with early identification of exotic invasive species.

INVASIVE SPECIES MONITORING

Dozens of aquatic invasive species, from microscopic viruses to giant leaping carp, have recently been in the news. In order to help stop the spread of these aquatic invaders, the DNR is looking to volunteers. Help is needed at boat landings to inspect watercraft and educate boaters on how to stop exotics from hitchhiking to other lakes and streams. The Marinette County LWCD also trains volunteers on monitoring methods to detect many of the latest exotic plants, fish and crustaceans. Early detection is critical in controlling new infestations.

VOLUNTEER MONITORING OPPORTUNITIES FOR YOUTH

Unique opportunities also exist for youth organizations and school groups to monitor a local lake or stream. Through the Adopt-a-Lake program, groups can monitor water quality, keep watch for exotic species, and learn about their lakes through hands-on learning opportunities. The Marinette County LWCD also has water-quality based education programs designed to get kids out of the classroom and into the water, where they can get up-close and personal with a local lake or stream.

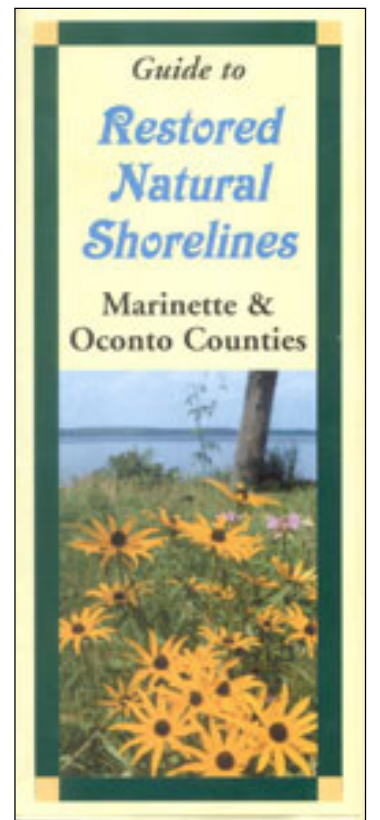
VOLUNTEER MONITORING CONTACTS

For water quality monitoring in Marinette County, you can contact the DNR Northeast Region Volunteer Coordinator Christina Hodge at (920) 303-5449. For Adopt-a-Lake and exotic species monitoring contact UW-Extension Citizen Lake Monitoring Coordinator Laura Herman at (715) 346-3989. For local assistance, call Marinette County LWCD Water Resource Specialist Chuck Druckrey or Information & Education Specialist Anne Warren at (715) 732-7780.

Shoreline Restoration Brochure Now Available!

The Marinette County Land & Water Conservation Division, in partnership with Oconto County Land Conservation Department has developed a new brochure highlighting successful shoreline restoration projects on six local lakes. The brochure can be found at many of the same places we distribute the *Northwoods Journal*, as well as at the Marinette County Courthouse.

The brochure features pictures of the restoration sites, provides directions, and explains why replacing turf lawn with natural vegetation is one of the best things you can do for the health of your lake. It also has information about conditions and the plants chosen for each site. If the site conditions at a restoration site matches your lot, odds are good that the same plants will work for you. For more information, or to discuss a shoreline restoration on your property, contact Land & Water Conservation at (715) 732-7780. The LumberJack Resource Conservation and Development Council garnered grants from the Wisconsin Department of Natural Resources and the Wisconsin Coastal Management Program to fund brochure printing and development costs.



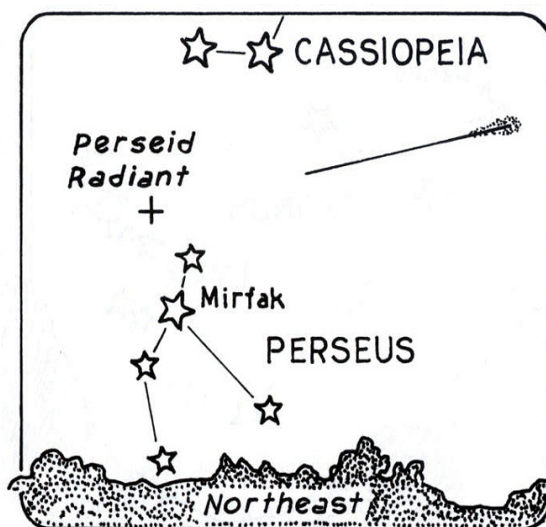
Meteors and the Moon in August

By Dr. Paul S. Erdman, UW-Marinette

Picture from Chet Raymo's *365 Starry Nights*

The *Perseid meteor shower* takes place every year in August - this year it will reach its maximum from midnight on Sunday the 12th until dawn Monday morning. There should be the usual average of 60 meteors per hour; meteors can be seen on nights

before and after the peak night, but in fewer numbers. It is named the Perseid shower because the meteors seem to emerge from one point in the constellation Perseus, called the *radiant*. You needn't look directly at the radiant to see the meteors - just find a comfortable place to lie down and look overhead. Your peripheral vision will allow you to better see meteors, and they are slower and brighter than in other meteor showers, so you can see them before they burn out.



This year we may see the fainter meteors, since the moon will not light up the skies during the peak

hours. In fact, there will be a new moon on August 12th, so we won't see it at all. About two weeks after a new moon, you should expect to see a full moon - in fact, on the morning of August 28th, the full moon will pass into the shadow of the earth causing a total lunar eclipse. This event will occur on a Tuesday morning before sunrise, but if you get up early enough you might be able to spot the eclipsed moon as it sets at about 6:00 a.m.

A lunar eclipse takes place in stages, not all of which are noticeable. The first stage is when the moon enters the weak portion of the earth's shadow, known as the *penumbra*. That will happen at 3:20 a.m. for this eclipse, but the dimming effect on the moon is so slight that you may not notice it. The more obvious shading of the moon occurs when the moon enters the darker part of the earth's shadow, known as the *umbra*. That will occur at 3:51 a.m. for this eclipse, and is considered by most people to be the beginning of the eclipse. The umbra gradually moves across the face of the moon to darken it to a dull reddish color, which might be quite red for this eclipse because the moon is so close to the horizon. The moon should be completely in the umbra by 4:52 a.m. (considered to be the beginning of the total eclipse). We will not be able to see the rest of the eclipse and might have trouble seeing the shaded moon as it sets only 15 minutes before the sun starts to rise. For those of you who get up before 6:00 a.m. to go to work, you're going to have to look hard to find that dull reddish moon low on the southwestern horizon. Some people wonder why the full moon doesn't always end up giving us an eclipse every month, since a full moon is on the opposite side of the earth from the sun and therefore is on the side where the earth's shadow should be. The simple answer is that the moon misses the shadow.

METEORS continued on page 7



Native Landscape Trees: Sugar Maple

By Scott Reuss, UW-Extension Horticulture/Agriculture Agent
Photos courtesy of Gary Fewless, UW-Green Bay Herbarium

The Wisconsin state tree is the focus of this edition's native landscape selection. Sugar Maple, *Acer saccharum*, was actually voted in as the Wisconsin state tree by a statewide election of school children in 1893 and reaffirmed in 1948 with the same method. This species makes up a sizable percentage of our native forest, at least where the soils are right. It also does well in our managed landscapes, given proper care.

Although known to be able to handle some soil variation, Sugar Maples do best on well-drained loam soils with a pH of 5.5 to 7.3. In Marinette County, this limits growing sites - it cannot tolerate sandy soils or swampy lowlands with poor drainage. If you wish to place a Sugar Maple in your landscape, analyze the soil in your area and place the tree correctly. Also note that they are very susceptible to salt damage, so try not to place them by roads and driveways.



Sugar Maples offer certain aesthetic characters, most notably their fall color of yellow, burnt orange, or red. During the growing season, the large leaves have a medium to dark green color. Due to their relatively high canopy, the bark is generally visible, with the bark's ruggedness generally considered as an additional attribute. The native species is most widely available and the most utilized, but there are dozens of cultivars in the landscape market that you could select. You can choose from different heights, widths, fall color, and growing season leaf color. To find out about available cultivars and their traits, go online to: <http://web1.msue.msu.edu/imp/modzz/00000031.html> (Michigan State University Extension).

When placing a Sugar Maple, take into account its mature size. The native species grows to a height of 60 – 75 feet and a spread of 40-50', although it is a slower-growing tree. Young Sugar Maples develop well in partial shade, but if exposed to full sunlight they will need more water to do well. Also note that they produce a large number of seeds after about 20 years; however, in comparison to other maples, their seed productivity is not high, and they are not considered as invasive as other species. The Sugar Maple is most easily confused with Norway Maple, which is a very invasive tree (you can easily tell a Norway from a Sugar by pulling a leaf off a branch: if sap is milky, it is a Norway; if sap is clear, it is a Sugar). Another reason to consider this tree is if you are

interested in making your own maple syrup. Please note that a single tree will produce about 20 gallons of sap, which will yield about a half-gallon of syrup.

If you are transplanting Sugar Maples from a forest to a new spot, make sure to keep the soil level consistent (please note that you can transplant trees from your own land or from other private land with permission, but you cannot harvest trees from public land - you can only collect seeds). If you have purchased a maple tree, you need to find where the proper soil level should be, as it will appear to be different from where it should actually be. Whether potted, balled, or burlapped, you will need to dig down through the soil and find where roots curve away from the trunk, and place that line at the soil level. This may be as much as 6-8 inches below the soil level in the pot or soil ball. If you place the tree too deeply in the soil, the trees will develop girdling roots, and are much more susceptible to winter damage (Sugar Maples are already very susceptible to this). You should also use tree wraps of some type around young tree trunks during the wintertime to help prevent winter damage. (Photo at right courtesy of Stan Tekiela, from *Trees of Wisconsin Field Guide*, 2002).



Citizen Lake Monitoring Network



Did you know that there are 442 lakes in Marinette County? Each one provides us with recreational opportunities and scenic beauty, while fostering a unique, intricate, and delicate ecological community. To ensure these benefits survive for our grandchildren's enjoyment, we must actively monitor and maintain the water quality and surrounding ecosystems. This duty typically falls to state and county governments, but Wisconsin has far too many lakes for local agencies to effectively monitor them all.

With this in mind, the Wisconsin Department of Natural Resources teamed up with interested and active citizens in 1986 and began the Citizen Lake Monitoring Network. Volunteers measured water clarity in 126 lakes in the first year. Since then, the program has been expanded to include chemical sampling and exotic species identification and mapping. Currently, over 1,100 volunteers are actively monitoring 850 lakes throughout Wisconsin. Of these lakes, though, only the following nine are in Marinette County: Bass, Big Newton, Glen, Hilbert, Little Newton, Noquebay, Oneonta, Thunder, and Town Corner.

That's why we need your help! For twenty years, environmentally-conscious citizens like you have committed a few hours of their time a month to keeping Wisconsin lakes healthy. The ability and responsibility for stewardship of our lakes and water resources falls upon all of us. So please, if you feel the health of your local lakes is important, give us a call and find out how you can become a Citizen Lake Monitor. Call the Land & Water Conservation Division at 715-732-7780 for details, or see sidebar on page 4.

Would you like to read the *Northwoods Journal* online? Each issue is posted monthly on the Marinette County website at <http://www.marinettecounty.com>. At the bottom of the homepage is a link to back issues. We can even send you an e-mail reminder when each new issue is posted. To set it up, email Anne at awarren@marinettecounty.com or call 715-732-7784.



Great Lakes Coastal Wetlands

By Kendra Axness, UW-Extension Basin Educator

When was the last time you picked a sunny day to stop at Seagull Bar in Marinette or to visit the Peshtigo Harbor Wildlife Area south of Peshtigo? If it's been a while – or if you've never thought of visiting – you should consider making a special trip to these important Marinette County places. Wisconsin is fortunate to have such opportunities, since it is one of only eight states in the U.S. with Great Lakes shoreline. The Great Lakes (including Lake Michigan and Green Bay) and their connecting channels form the largest freshwater system on earth, holding about one-fifth of the world's freshwater supply. For thousands of years, they have helped shape the land that surrounds them, and in many places wetlands have formed where water meets land. These coastal wetlands are vital to the health of the Great Lakes by reducing nutrients that lead to algal growth, settling sediments from upstream erosion, and helping to decrease contaminant concentrations through sedimentation and uptake by plants and animals. They also provide spawning and nesting habitat for many species of fish, thereby supporting the recreational and commercial fisheries that are so important to many of us.



Seagull Bar, photo courtesy of DNR

Coastal wetlands are defined as “areas directly affected by Great Lakes water levels, which rise and fall in short-term, seasonal, and multi-year cycles”. The water levels affect the types of plant communities that exist in an area and these communities are classified based on factors such as their tolerance for water, climate, soil type, and land use. The communities include (from lake to upland): open water or aquatic (with submerged or floating plants), emergent marsh, shoreline or strand, wet meadow, swamp, and upland. Herbaceous plants dominate emergent marshes and wet meadows, while shrubs or trees dominate swamps. As water levels fall, the marsh, meadow, and swamp communities will expand lakeward; consequently, as water levels rise these communities will retreat landward. The changing water levels, and the subsequently changing plant communities, make coastal wetlands very dynamic ecosystems. Since water levels are currently low, the plant communities are expanding lakeward.

The wetlands along Green Bay's west shore have been referred to as a “world-class resource” by some researchers, and there are many places between Green Bay and Marinette where the public is invited to view them up close. These include Sensiba Wildlife Area near Green Bay; Pecor Point just south of the City of Oconto; Oconto Marsh just north of the City of Oconto; and Peshtigo Harbor Wildlife Area, which arguably contains the most diverse and least

disturbed wetland complex on the west shore of the bay. Marinette County, in cooperation with the Department of Natural Resources and UW-Extension, recently used a Coastal Watershed Management Grant to establish a water trail as well as hiking and cross-country skiing trails through this area, which is owned and managed by the state (for more information, see the *Peshtigo River* article on page 7 or contact the Land & Water Conservation Division).



Peshtigo Wildlife Area, photo courtesy of DNR

Great Lakes coastal wetlands provide habitat for some amazing creatures. Since Green Bay's west shore is an important bird migration corridor and provides high-quality shorebird habitat, it isn't surprising that birds are especially diverse there. The following is a small selection of unique native animals that are known to occur (some rarely) in the coastal wetlands along Green Bay's west shore:

Northern Harrier (*Circus cyaneus*)

The Northern Harrier, sometimes referred to as the Marsh Hawk, is a medium-sized hawk that lives in open grassland and marshes. They build nests on the ground in thick grass or other vegetation and primarily eat small mammals (especially mice) and birds, which they find by flying low over the ground. Unlike other hawks, the Northern Harrier relies on its hearing as well as its vision to capture prey - the feathers of the face form a “facial disk” that helps transmit sound.



Photo courtesy of Harry Darrow

Yellow Rail (*Coturnicops noveboracensis*)

The Yellow Rail is a sparrow-sized marsh bird that is listed as a threatened species.



Photo courtesy of Alvin E. Staffan

Its preferred habitat is wet sedge meadow, a type of habitat found in the Peshtigo Harbor State Wildlife Area. It feeds mostly on snails, insects, and occasional seeds. They nest on the ground and females lay 4-10 eggs at a time.

Bullfrog (*Rana catesbeiana*)

The bullfrog is a common amphibian that can be found throughout Wisconsin. Like all amphibians, they need both land and water habitats to survive and prefer habitats with tall, undisturbed shoreline vegetation and abundant submergent and floating aquatic vegetation (see the *Frogs & Toads* article on page 2 for more information about this animal).

Blanding's Turtle (*Emydoidea blandingii*)

Blanding's turtle is a medium-sized turtle (up to 10 inches long) that can be found in most of Wisconsin, although it is listed as a threatened species. It is a semi-aquatic turtle, preferring shallow marshy habitats with abundant submerged vegetation but occasionally venturing into dryer areas to bask in the sun. It is unique because, unlike most turtles, it can swallow food both in and out of the water. It eats crustaceans (especially crayfish), snails, insects, frogs, fish, earthworms, slugs, grasses and berries.



Photo courtesy of A.B. Sheldon for the DNR

These and other animals are threatened by habitat fragmentation, runoff pollution, and exotic invasive species. *Habitat fragmentation* occurs as land is developed, and as a result animals that need large, undisturbed areas to live are often displaced. *Runoff pollution* is the result of rain or snowmelt flowing over the ground surface and transporting pollutants (such as oil, soil particles, and grass clippings) to nearby surface water bodies via the storm sewer systems, and is not treated at a treatment plant. Both humans and animals transport *invasive species* as they move from one place to another. Invasive plants that are particular threats include common reed, reed canary grass, and purple loosestrife. These plants can harm wetlands because they replace the native vegetation that native organisms need to survive.

You can help protect these valuable wetlands in a number of ways: prevent runoff pollution at home by directing downspouts to grassy areas rather than paved areas to allow rainwater to soak into the ground; wash your car on the grass or go to a commercial carwash to prevent detergent from reaching storm drains; and reduce the amount of phosphorus fertilizers you use on your lawn. Even if you don't live right next to Green Bay, your actions will still make a difference for the wetlands.

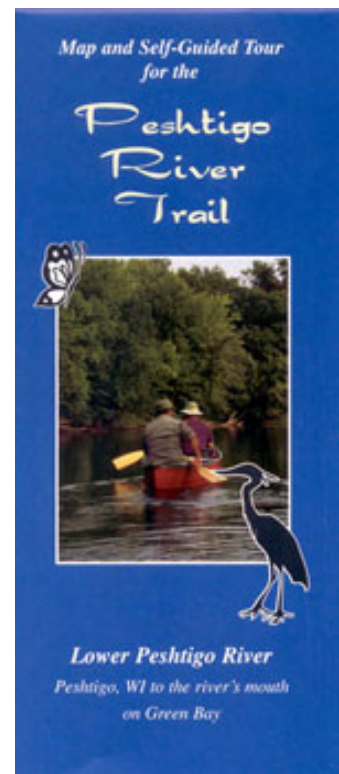
COASTAL WETLANDS continued on page 7



Continuing downstream, the river soon flows into Johnson Falls Flowage. This 69-acre flowage is very long and narrow, resembling a deep river more than a lake. The boat landing is only suitable for small craft, so recreational boats are seldom seen. The seven miles of river below Johnson Falls Dam contains some of the last fast water on the river. This stretch is commonly called the fly-fishing area because special trout regulations prohibit fishing with live bait. Here the riverbanks tower above the river, giving the feel of traveling through a wild mountain canyon. Few boaters take advantage of the rapids here, leaving the river to anglers. The Peshtigo River State Forest maintains an unimproved road system and fishing access points in the fly fishing area. Next you'll come to Sandstone Flowage, and like Johnson Falls, Sandstone is a long narrow flowage. A single boat landing provides adequate public access.

As the Peshtigo continues downstream, its nature changes greatly. For the next 32 miles the shoreline is privately owned and development is much more common. Still, the adjacent floodplain precludes development over much of its length and the river maintains a natural feel. Gone, too, is the fast water and rapids of the upper river. Here the river slows as it meanders through sandy plains. Numerous road crossings and small parks provide excellent access for canoeists and kayakers. On a hot summer weekend, you can often see groups tubing down the river enjoying the excellent swimming and inviting sand bottom.

Three miles above Highway 64, the river widens as it enters Bagley Flowage. In Bagley the river divides into numerous channels that in the summer are flanked by walls of wild rice and bulrushes. The entire shoreline of Bagley is part of the Peshtigo River State Forest. The only public accommodation here is a single boat landing on the east shore off Bagley Road. Bagley is popular with local anglers in search of bass, pike and bluegill. Between Highway 64 and the City of Peshtigo, the current remains slow as the river weaves around islands and through braided channels. Along the banks, most of the high ground is developed and pleasure boat traffic increases as you approach the city. Badger Park in the city of Peshtigo offers camping, a large playground, picnic area, and swimming beach.



Below the dam in Peshtigo, the river begins the last leg of its journey to the Bay. These last 11 miles are once again almost entirely wild and undeveloped. Here the river flows gently through bottomland hardwoods and along high sand banks. Approaching the bay the forest disappears as you enter one of the few undeveloped estuaries on the Great Lakes. The extensive marsh is home to numerous waterfowl, shorebirds and other wetland wildlife. In addition to abundant smallmouth bass, northern pike, and walleye the river also receives seasonal runs of salmon, steelhead and sturgeon from Green Bay.

This portion of river provides a popular day trip for canoeists and kayakers. Marinette County maintains a self guided interpretive water trail that highlights the natural communities and history of the lower Peshtigo River. So while Marinette County may have longer rivers and larger lakes, none offer the range of opportunities and experiences that can be found on the Peshtigo

River and its many flowages. The same river that provides adrenaline-pumping whitewater fun also offers water skiing, swimming, spectacular scenery, and relaxing float trips.

METEORS continued

The orbit of the moon is tilted by 5 degrees to our earth's orbit around the sun, and those 5 degrees are enough to have the moon pass above and below the earth's shadow most of the time. When the path of the moon intersects the path of the sun at the time, the moon is full or new, and we'll get a lunar or solar eclipse, respectively. That's why the path of the sun through the sky is called the *ecliptic*. These intersection points change year after year because the tilted orbit of the moon wobbles around like a toy top wobbles as it spins. This motion of the moon's orbit takes about 18 years to repeat itself, so there may be August eclipses again in 2025 or 2026.

For more information on the Perseid meteor shower or the Lunar Eclipse, consult August issues of magazines such as *Sky and Telescope* or *Astronomy*. For more information on the wobble of the moon's orbit try the website <http://www.aaa.org/aaahighlowmoon.htm>.

WHERE IN MARINETTE COUNTY?

Tell us where this photo was taken and you could win a prize!



Send us a note including your name, address, and phone number, or email awarren@marinettecounty.com to give us your answer. Any interesting facts about the photo are welcome. **Please respond by August 20, 2007.** Correct answers are entered into a drawing for a \$20 gift card from Wal-Mart!

Congratulations go to Bev Kiekhaefer from Greenleaf for guessing July's photo! The Lickety Split Ice Cream Shop was across from Twin Bridge County Park. Originally it was called Parkside Ice Cream and had a gift shop and a miniature golf course. The building is no longer there, but many people have fond memories of it. Thank you to everyone who sent in entries and background information. Keep guessing for this month, and good luck!



COASTAL WETLANDS continued

If you own waterfront property and are seeing the growth of wetland plants as water levels have gone down, you can leave the vegetation in place. Not only will you be making space for a vital part of the Great Lakes ecosystem, you will also be avoiding the disturbance that makes invasion by common reed more likely. If you are thinking about removing some of the vegetation in the shoreline area, remember that most activities require a state permit. Check with your DNR Water Management Specialist for more information.

Some information for this article is from *Where Land Meets Water: Understanding Wetlands of the Great Lakes* by Environment Canada, 2002 (Toronto, ON. 72 pp).

For more information:

Robert Rosenberger, DNR Water Management Specialist for Marinette and Oconto Counties: Robert.rosenberger@wisconsin.gov, 715-582-5041.

Coastal Wetlands of Wisconsin's Great Lakes: A Data Compilation and Assessment, <http://www.dnr.state.wi.us/org/land/er/publications/cw>.

Amphibians of Wisconsin by Rebecca Christoffel, Robert Hay and Michelle Wolfram. Wisconsin Department of Natural Resources Publication PUB-ER-105 2001.

Turtles & Lizards of Wisconsin by Rebecca Christoffel, Robert Hay and Megan Monroe. Wisconsin Department of Natural Resources Publication PUB-ER-104 2002.

Between Sky and Shore: Wisconsin's Coastal Wetlands by Maureen Mecozzi. 1996. Produced by the Wisconsin Coastal Management Program and the Wisconsin Department of Natural Resources.



Area Events Calendar

- June-August** **Sunset Concert Series.** Tuesday evenings 7:00-9:00pm on Stephenson Island, Marinette. Call 800-236-6681 for more information.
- June-August** **Bands at Badger Park.** 7:00-9:00pm.Sponsored by Peshtigo Women’s Club, free admission. Bands on August 15 and August 22. Call 715-582-0566.
- August 2-5** **25th Annual Waterfront Festival.** Menominee's Great Lakes Marina Memorial Park. Admission is free. Features the UP’s largest parade, spectacular fireworks, youth and family activities, food and musical entertainment. More information call 906-863-2679.
- August 4** **4th Annual Pembine Community & American Legion Picnic.** 11:00am-9:00pm. Horse pulling contest, live music, kids games, crafts and raffles. \$1 lunch donation. Call 715-324-5237 for more information.
- August 4** **St. Hubert Shrine Picnic.** 6th Annual Ride to St. Hubert Shrine with Dun-Good Riders. Contact 715-324-5737 for more information.
- August 5** **St. Agnes/St. Augustine Church Picnic.** 507 Church Street, behind the church on the hilltop in Wausaukee. Mass at 10am followed by food and fun. Admission is free. DJ music, wagon rides, bingo, kids games, pokerina and dunk tank. Food/drinks and tickets individually priced.
- August 11** **35th Annual M&M Antique Car Club Show.** 8:00am-5:00pm in Menominee’s Historic Waterfront District. Free admission. Call 906-863-9616 for more information.
- August 11** **Silver Cliff Fire & Rescue Picnic.** 11:00am-7:00pm, Memorial Picnic Grounds, Cty. Hwy C just west of Cty. Hwy I. Parade at 10am.Games, DJ, food refreshments. Call 715-757-2333 for more information.
- August 11** **4th Annual Car, Truck, Bike & Tractor Show.** Curve Inn Resort, Parkway Road, Crivitz. Music, pig and corn roast, brats, burgers, beverages. Contact 715-757-2021.
- August 16** **Harmony Prairie Walk.** Harmony Arboretum, seven miles west on Hwy. 64, then one half mile south on County Road E. Free program from 6:30-8:00pm. See schedule below.
- August 19** **11th Annual St. Mary’s of the Lake Mass & Picnic.** Polka Mass @ 10am, picnic to follow. All proceeds go to the building fund.
- August 23-26** **Marinette County Fair.** Located at the County Fairgrounds in Wausaukee. Carnival rides, entertainment, food, refreshments, music, demo derby. Contact 920-897-3222 or 715-582-0622.
- Aug.24-Oct. 5** **Environmental Awareness Poster Contest.** Sponsored by the Wisconsin Land & Water Conservation Association and the Land & Water Conservation. There are 6 different divisions from Kindergarten through 12th Grade. Posters need to be at the Land Information Office by October 5, 2007. For more information please call (715) 732-7780.
- August 25** **Murder Mystery Dinner Fundraiser for Stephenson Library Renovation.** 6:00pm. Murder Mystery Dinner at Riverside Country Club. Advance tickets \$50, will include dinner and Murder Mystery Show. For more information, call Tim at 715-732-7572.
- August 25** **March of Dimes Benefit Ride.** Vandervest Harley-Davidson, 810 Frontage Road, Peshtigo Sponsored by Vandervest Harley Davidson. More information call 715-582-8843 or visit www.marchofdimesride.org or www.vvhd.com
- August 25** **River Cities Habitat for Humanity Golf Outing.** Woodland Ridge Golf Course, Crivitz Shotugn start, 18-hole event. Cost \$60 per person. To register call 715-854-7833.
- August 29** **Salsa Night at Harmony.** Harmony Arboretum, seven miles west on Hwy. 64, then one half mile south on County Road E. Free program from 6:00-8:00pm. See schedule below.



August 2007 Harmony Arboretum Schedule

(programs are free unless otherwise stated)

- August 16 - Prairie Walk, 6:30-8:00pm**
Prairies once covered two million acres of Wisconsin, but as Europeans settled here, they converted the treeless prairies into crop fields and learned to control the sweep of wildfires. Today, less than 12,000 scattered acres of prairie exist in Wisconsin. During this program, you will learn what exactly a prairie is, and why people are restoring them. Local native plant enthusiasts will tell you why the Harmony Arboretum prairie project was started and how it is managed. This is the time of year when many prairie flowers bloom, so come and take in some of nature's beauty. Please call the Marinette County Land & Water Conservation at (715) 732-7780 to register.
- August 29 – Salsa Night, 6:00-8:00pm**
¡Ole! It’s Salsa Time! Check out how to grow the fresh garden ingredients you need to make salsa; learn safe salsa preservation; then taste and take home some different recipes for this healthy snack. For more information call UWEX at (715) 732-7510.

THE OFFICIAL 2007-2008 MARINETTE COUNTY PLAT BOOK



Available in August
\$20 (plus postage if mailed)
Land Information Office
Marinette County Courthouse
1926 Hall Avenue, Marinette, WI
For more information or to order,
please call 715-732-7780.



Spokes & Folks Bicycle Club

www.spokesandfolks.com



Guests are welcome, helmets are required. Lights are recommended on some rides.

August 2007 Ride Schedule
(See website for more details)

Saturday Morning Rides
May 5-August 25 leave at 8am
Meet at the Marinette City Park near the restroom. From June through August, rides are longer, approximately 45 miles. Contact: Vern @ 715-587-4341.

Wednesday Night Fast Rides
Leaving from Cycle Path in Menominee at 6pm on Wed. nights. Anyone can join, but if you don’t keep up, you will be left behind. Contact: Adam @ 906-863-9361.

Century Ride – August 11
Meet at 8am at Marinette City Park. The ride consists of 2-3 loops, including Wallace, Oconto, Menominee, and Peshtigo. Contact: Vern @ 715-587-4341.

Casino Ride – August 16 & 17
Leave from Marinette City Park at 11am on the 16th. Ride 55 miles to the Chip In’s Island Resort Casino. Contact: Vern @ 715-587-4341.

Grand Island Bike Ride - August 19
Leave Marinette at 6am to Munising for the ferry crossing. We’ll spend 8 hours on the island and return home that night. The ferry is \$15/person and \$5/person per bicycle. Contact: Vern @ 715-587-4341.

Wednesday Morning Ride – August 22
Leaving from Marinette City Park at 9am - meet near the restroom. Ride to Oconto & back. Contact: Vern @ 715-587-4341.

West Shore Fishing Museum Ice Cream Social Ride – September 2
Meet at Cycle Path in Menominee at 10am. This ride will be 25 miles out and 25 miles back with a stop along the bay for refreshments. Contact: Mel @ 715-587-7300.

UP Mountain Bike Ride - September 8
A 25-mile mountain bike ride on gravel, single track and 2 track. At the end of the ride there is a wet river crossing with a lunch stop by a secluded waterfall. Contact: Vern @ 715-587-4341.

Marinette County
Harmony Arboretum

½ mile south of Hwy 64, on County E

Extension : 715-732-7510
Land Information Office: 715-732-7780
<http://www.marinettecounty.com>